

Application Serial No: 10/529,154
Responsive to the Office Action mailed on: November 30, 2009

REMARKS

This Response is in response to the Office Action mailed on November 30, 2009.
Claims 1-3 and 5-10 are pending.

§ 102 Rejection:

Claims 1-3, 4, 6, 8, 10 are rejected as being anticipated by Kim (US Patent No. 5,987,904). This rejection is traversed.

Claim 1 is directed to a cooling device that recites, among other features, that the cooler and the cooling chamber are partitioned by a partition so as to allow cold air to be accumulated in the cooler. Claim 1 further recites that a rotation of the fan generates a sucked flow of cold air sucked from the cooling chamber to the cooler through the aperture. Also, claim 1 recites that the discharged flow and the sucked flow directed from the cooling chamber to the cooler collide with each other in the aperture.

Kim does not disclose or suggest these features. The rejection includes an annotated Figure A to reference certain elements not identified in Kim. For clarity, Applicant has provided a further annotated Figure A on page 4 of this Response that specifies further elements not identified in Kim or the annotated Figure A provided in the rejection.

The rejection interprets the evaporator 11, cooling chamber F, and partition C shown in annotated Figure A as the cooler, the cooling chamber and the partition, respectively, of claim 1. However, the partition C partitions only the cooling chamber F placed in front of the partition M (see further annotated Figure A below). That is, the partition C and the partition M are separated by a simple space that prevents the partition C from allowing cold air to be accumulated in the cooler. Thus, Kim does not disclose or suggest that the cooler and the cooling chamber are partitioned by a partition so as to allow cold air to be accumulated in the cooler, as recited in claim 1.

Also, the fan 20 in Figure A is disposed in an aperture I formed in the partition M (see further annotated Figure A below). However, if partition C is interpreted as the partition of claim 1, Kim cannot disclose or suggest that the partition in front of the fan has an aperture formed in a flat sheet portion, and that an open space is formed between the fan and the flat sheet portion in which the aperture is formed.

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Further, due to the configuration in Figure A in which the aperture I is formed to surround the fan in the partition M, when the fan is rotating, cold air cooled by the cooler K is blown into the cooling chamber F through the aperture I and the aperture D. The cold air blown into the cooling chamber F circulates in the cooling chamber F as indicated with the arrows within the cooling chamber F, and at the same time, is sucked into the air duct J through the aperture B. Thus, in this configuration, the flow of cold air in the vicinity of the fan is limited to only flowing toward the cooling chamber F. This is shown in Figure A below, where only an arrow L directed to the flow of air entering cooling chamber F through the aperture D is provided, and with no arrow indicating a flow of air exiting cooling chamber F through the aperture D. Figure A and the disclosure of Kim do not disclose or suggest generating a flow of air directed towards the cooler K through the aperture I or a flow of air directed towards the cooler K through the aperture D.

Thus, Kim does not disclose or suggest that a rotation of the fan generates a sucked flow of cold air sucked from the cooling chamber to the cooler through the aperture, as recited in claim 1. Accordingly, Kim also cannot disclose or suggest that the discharged flow and the sucked flow directed from the cooling chamber to the cooler collide with each other in the aperture, as recited in claim 1.

For at least these reasons claim 1 is not suggested by Kim and should be allowed. Claims 2, 3, 5, 6, 8 and 10 depend from claim 1 and should be allowed for at least the same reasons.

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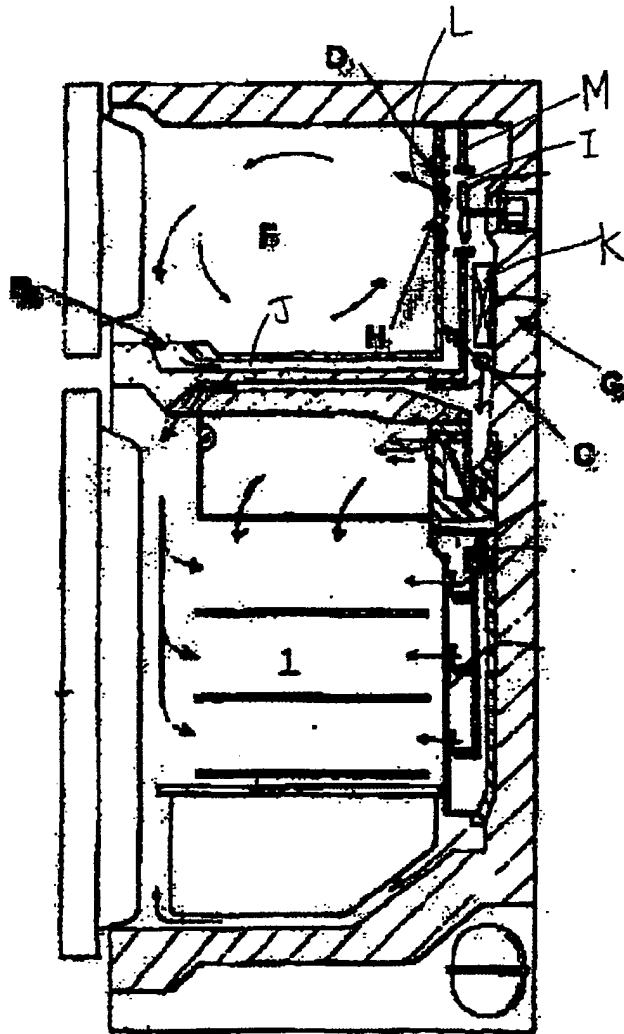


FIG. A

§103 Rejection:

Claims 7 and 9 are rejected as being unpatentable over Kim in view of Howe (US Patent No. 4,420,697). This rejection is traversed. Claims 7 and 9 depend from claim 1

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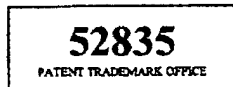
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and should be allowed for at least the same reasons discussed above. Applicant does not concede the correctness of this rejection.

Conclusion:

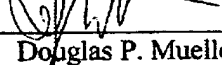
Applicants respectfully assert that the pending claims are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



Dated: January 25, 2010

Respectfully submitted,

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